What is claimed is:

1.   An image processing apparatus for interpreting printing data, and developing said printing data into bit map data in plural drawing bands comprising:

5   (a) an upside-down print setting unit for setting upside-down printing for reversed printing from an end drawing band to a head band among said plural drawing bands,

          (b) a band selecting unit for selecting a drawing band among said plural drawing bands based upon information from the upside-down print setting unit 10   while referring to a link list having arrangement information of said plural drawing bands,

          (c) a compression direction determining unit for determining sequence of compression of bit map data in a drawing band among said plural drawing bands based upon information from the upside-down print setting unit, and

15   (d) a data compressing unit for compressing data of the selected drawing band selected by the band selecting unit according to the sequence determined by the compression direction determining unit.

2.   An image processing apparatus for interpreting printing data, and 20   developing said printing data into bit map data in plural drawing bands comprising:

          (a) an upside-down print setting unit for setting upside-down printing for reversed printing from an end drawing band to a head band among said plural drawing bands,

25   (b) a link list conversion unit for reversing arrangement of said plural

drawing bands of a link list having arrangement information of said plural drawing bands, in the case of upside-down print base upon information from the upside-down print setting unit,

(c) a band selecting unit for selecting a drawing band among said plural drawing bands by referring to the link list,

(d) a compression direction determining unit for determining sequence of compression of bit map data in a drawing band among said plural drawing bands based upon information from the upside-down print setting unit, and

(e) a data compressing unit for compressing data of the selected drawing band selected by the band selecting unit according to sequence determined by the compression direction determining unit.

3.   An image processing apparatus for interpreting printing data, and developing said printing data into bit map data in plural drawing bands comprising:

(a) a mirror-reversed print setting unit for setting mirror-reversed printing by decompressing compressed data sequentially from a line end address of each of said plural drawing bands,

(b) a band selecting unit for selecting a drawing band among said plural drawing bands by referring to a link list having arrangement information of said plural drawing bands,

(c) a compression direction determining unit for determining sequence of compression of bit map data in a drawing bands among said plural drawing bands based upon information from the mirror-reversed print setting unit, and

(d) a data compressing unit for compressing data of the selected drawing

band selected by the band selecting unit according to the sequence determined by
the compression direction determining unit.

4.   An image processing apparatus for interpreting printing data, and
developing said printing data into bit map data in plural drawing bands
comprising:

(a) an upside-down print setting unit for setting upside-down printing for
reversed printing from an end drawing band to a head band among said plural
drawing bands,

(b) a band selecting unit for selecting a drawing band among said plural
drawing bands based upon information from the upside-down print setting unit,
while referring to one of a header and a footer of each of said plural drawing
bands having arrangement information of said each of said plural drawing bands,

(c) a compression direction determining unit for determining sequence of
compression of bit map data in a drawing band among said plural drawing bands
based upon information from the upside-down print setting unit, and

(d) a data compressing unit for compressing data of the selected drawing
band selected by the band selecting unit according to the sequence determined by
the compression direction determining unit.

5.   An image processing apparatus for interpreting printing data, and
developing said printing data into bit map data in plural drawing bands
comprising:

(a) a mirror-reversed print setting unit for setting mirror-reversed
printing by decompressing compressed data sequentially from a line end address

of each of said plural drawing bands,

(b) a band selecting unit for selecting a drawing band among said plural drawing bands by referring to one of a header and a footer of each of said plural drawing bands having arrangement information of said each of plural drawing bands,

(c) a compression direction determining unit for determining sequence of compression of bit map data in a drawing band among said plural drawing bands based upon information from the mirror-reversed print setting unit, and

(d) a data compressing unit for compressing the data of the selected drawing band selected by the band selecting unit according to the sequence determined by the compression direction determining unit.

6.   The image processing apparatus of claim 1, wherein said data compressing unit includes:

i) a data acquiring unit for acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) a compression processing unit for compressing the bit map data received from the data acquiring unit.

7.   An image processing method for interpreting printing data, and developing said printing data into bit map data in plural drawing bands comprising the steps of:

(a) setting upside-down printing for reversed printing from an end drawing band to a head band among said plural drawing bands,

(b) selecting a drawing band among said plural drawing bands based upon setting at step (a) while referring to a link list having arrangement information of said plural drawing bands,

(c) determining sequence of compression of bit map data in a drawing band among said plural drawing bands based upon setting at step (a), and

(d) compressing data of the selected drawing band at step (b) according to the sequence of compression.

8.   An image processing method for interpreting printing data, and developing said printing data into bit map data in plural drawing bands comprising the steps of:

(a) setting upside-down printing for reversed printing from an end drawing band to a head band among said plural drawing bands,

(b) reversing arrangement of said plural drawing bands of a link list having arrangement information of said plural drawing bands, in the case of upside-down print based upon setting at step (a),

(c) selecting a drawing band among said plural drawing bands by referring to the link list,

(d) determining sequence of compression of bit map data in a drawing band among said plural drawing bands based upon setting at step (a), and

(e) compressing data of the selected drawing band at step (c) according to the sequence of compression.

9.   An image processing method for interpreting printing data, and

developing said printing data into bit map data in plural drawing bands
comprising the steps of:

(a) setting mirror-reversed printing by decompressing compressed data
sequentially from a line end address of each of said plural drawing bands,

(b) selecting a drawing band among said plural drawing bands by
referring to a link list having arrangement information of said plural drawing
bands,

(c) determining sequence of compression of bit map data in the drawing
bands based upon setting at step (a), and

(d) compressing data of the selected drawing band at step (b) according
to the sequence of compression.

10.   An image processing method for interpreting printing data, and
developing said printing data into bit map data in plural drawing bands
comprising the steps of:

(a) setting upside-down printing for reversed printing from an end
drawing band to a head band among said plural drawing bands,

(b) selecting a drawing band among said plural drawing bands based
upon setting at step (a), while referring to one of a header and a footer of each of
said plural drawing bands having arrangement information said each of said
plural drawing bands,

(c) determining the sequence of compression of bit map data in a
drawing band among said plural drawing bands base upon setting at step (a), and

(d) compressing data of the selected drawing band at step (b) according

to the sequence of compression.

11.   An image processing method for interpreting printing data, and developing said printing data into bit map data in plural drawing bands comprising the steps of:

(a) setting mirror-reversed printing by decompressing the compressed data sequentially from a line end address of each of said plural drawing bands,

(b) selecting a drawing band among said plural drawing bands by referring to one of a header and a footer of said each of said drawing band having arrangement information of said plural drawing bands,

(c) determining sequence of compression of bit map data in a drawing band among said plural drawing bands based upon setting at step (a), and

(d) compressing the data of the selected drawing band at step (b) according to the sequence of compression.

12.   The image processing method of claim 7, wherein said compressing steps includes the steps of:

i) acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) compressing the bit map data.

13.   The image processing apparatus of claim 2, wherein said data compressing unit includes:

i) a data acquiring unit for acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) a compression processing unit for compressing the bit map data received from the data acquiring unit.

5

14.   The image processing apparatus of claim 3, wherein said data compressing unit includes:

i) a data acquiring unit for acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

10   ii) a compression processing unit for compressing the bit map data received from the data acquiring unit.

15.   The image processing apparatus of claim 4, wherein said data compressing unit includes:

15   i) a data acquiring unit for acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) a compression processing unit for compressing the bit map data received from the data acquiring unit.

20   16.   The image processing apparatus of claim 5, wherein said data compressing unit includes:

i) a data acquiring unit for acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) a compression processing unit for compressing the bit map data received from the data acquiring unit.

17. The image processing method of claim 8, wherein said compressing steps includes the steps of:

i) acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) compressing the bit map data.

18. The image processing method of claim 9, wherein said compressing steps includes the steps of:

i) acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) compressing the bit map data.

19.   The image processing method of claim 10, wherein said compressing steps includes the steps of:

i) acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) compressing the bit map data.

20.   The image processing method of claim 11, wherein said

compressing steps includes the steps of:

i) acquiring the bit map data from a memory based upon the arrangement information and the sequence of compression, and

ii) compressing the bit map data.